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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/627,282 | 07/25/2003 | Kanji Hanashima | N&H 443 | 3678 |

23474 7590 09/07/2004

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EXAMINER

PATEL, VISHAL A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3676

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,282

Applicant(s)

HANASHIMA ET AL.

Examiner

Vishal Patel

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MW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 2,3,7 and 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Terence (GB 2,235,260).

Regarding claim 1: Terence discloses a gasket (gasket of figure 3a) comprising two metallic coned disc springs (springs members that are connected by weld at 23) each of which has a central opening (opening of each ring opposite the weld) therethrough for a fluid in a central portion (fluid flow through the central opening when placed between flanges, figures 1 and 2) and each of which is formed into a seal surface (curve seal surface that will contact surfaces of flanges 11) in which a peripheral portion (peripheral portion that forms an arc surface that will contacts the flanges 11) about the circulation opening rises having an arc-like curved surface (the seal surface has an arc-like surface), the surface being inclined upwardly and extending outwardly in a radial direction from the circulation opening (the surface is inclined upwardly and extending outwardly in a radial direction), and the surface then being inclined downwardly and extending outwardly in the radial direction to an outer diameter peripheral edge portion (this would be the case to form a U or V or arc shape and ending to an outer diameter peripheral edge portion (where the two disc springs contact and are welded, the two disc springs

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being combined while oppositely directed and the outer diameter peripheral edge portions (edge portions at 23 that are welded) being welded and joined about the circumference thereof.

Regarding claims 4-6: The circulation openings are in axial alignment with each other (the openings are axially aligned. The central circulation openings are circular (this is the case since the openings are circular). The coned disc spring includes the circulation opening and a large opening defined by the outer peripheral edge portion before the coned disc springs are jointed about the respective peripheral edge portions (this is the case since each of the disc springs have the circulation opening with an inner diameter and an outer diameter of the outer peripheral edge that is welded).

Allowable Subject Matter

3. Claim 2-3 and 7-8 are allowed.

Regarding claim 3: Prior art fails to teach or fairly suggest a gasket having a three metallic coned disc spring, the first disc has a circulation opening for a fluid in a central portion and which is formed into a seal surface in which an outer peripheral portion with respect to the circulation opening rises having an arc-like curved surface, the second disc spring having a circulation opening for a fluid in a central flat portion, and the third disc which has a circulation opening for a fluid in a central flat portion and which is formed into a seal surface in which an outer diameter peripheral edge portion warps having an arc-like curved surface, **wherein the second disc is combined with the first disc spring while both are oppositely directed so that the outer diameter peripheral edge portions thereof are welded and fixed, and the third coned disc spring is combined with the second coned disc spring while both are oppositely directed so that the central flat portions thereof are welded and fixed.**

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Regarding claim 2 and 7-8: Prior art fails to teach or fairly suggest the claimed invention particularly two metallic coned disc springs having identical shapes, each disc spring has a central circulation opening therethrough for a fluid in a flat portion, each formed into a seal surface that extends outwardly and upwardly from the flat portion and wraps near an outer diameter peripheral edge portion to define an arc like curved surface, the two coned disc springs being combined while being oppositely directed and the central flat portions being welded and joined with each other.

Response to Arguments

4. Applicant's arguments with respect to claims 1 and 4-6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is (703) 308-8495. The examiner can normally be reached on Monday through Friday from 7:30 PM to 4:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann, can be reached on (703) 306-4115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168. Technology Center 3600 Customer Service is available at 703-308-1113. General Customer Service numbers are at 800-786-9199 or 703-308-9000. Fax Customer Service is available at 703-872-9325.


Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: 703-872-9326, for formal communications for entry before Final action: or,
703-872-9327, for formal communications for entry after Final action.

Hand-delivered responses should be brought to Crystal Park Five, 2451 Crystal Drive, Arlington, Virginia, Seventh Floor (Receptionist suite adjacent to the elevator lobby).

VP
September 1, 2004


ALISON PICKARD
Primary Patent Examiner
Tech. Center 3600